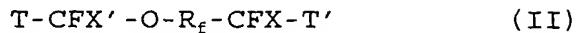


CLAIMS

1. Hydrofluoroethers of formula:



wherein:

$T = CH_3$;

X, X' , equal to or different from each other, are selected between F, CF_3 ;

$T' = F, Cl, H, C_1-C_3$ perfluoroalkyl, $CH_3, CH_2OH, COCl, CHO, CO_2H$;

R_f is selected from:

- C_2-C_{15} perfluoroalkylene;

- $-(C_2F_4O)_m(CF_2CF(CF_3)O)_n(CF_2O)_p(CF(CF_3)O)_q-$

wherein

the sum $n+m+p+q$ ranges from 2 to 200,

the $(p+q)/(m+n+p+q)$ ratio is lower than or equal to 10:100, preferably comprised between 0.5:100 and 4:100, the n/m ratio ranges from 0.2 to 6, preferably from 0.5 to 3; m, n, p, q are equal to or different from each other and when m, n range from 1 to 100, preferably from 1 to 80, then p, q range from 0 to 80, preferably from 0 to 50; the units with n, m, p, q indexes being statistically distributed along the chain;

- $-(CF_2CF_2CF_2O)_r-$ wherein r ranges from 2 to 200,

- $-(CF(CF_3)CF_2O)_s-$ wherein s ranges from 2 to 200,
- 2. A process according to claim 1, wherein R_f is selected from the following structures:
 - $(CF_2CF_2O)_m-(CF_2O)_p-$,
 - $(CF_2CF(CF_3)O)_n-(CF_2O)_p-(CF(CF_3)O)_q$
- 3. A process for the preparation of the formula (II) compounds of claim 1 comprising the reduction of the formula (III) corresponding precursors:

$$T''-CFX'-O-R_f-CFX-T''' \quad (III)$$

wherein:

$T'' = COCl$,

$T''' = F, C_1-C_3$ perfluoroalkyl, $COCl$, H , Cl ,

X, X', R_f are as defined in formula (II) of claim 1, carried out with gaseous hydrogen in the presence of a catalyst formed by supported platinum, preferably on metal fluorides, preferably in the presence of inert solvents, at a temperature in the range $20^\circ C-150^\circ C$, preferably $80^\circ C-120^\circ C$, at a pressure between 1 and 50 atm, preferably between 1 and 10 atm.
- 4. A process according to claim 3, wherein the metal fluorides are selected from the group formed by CaF_2 , BaF_2 , MgF_2 , AlF_3 , more preferably CaF_2 .
- 5. A process according to claims 3-4, wherein the Pt concentration on the support is comprised between 0.1%

and 10% with respect to the total weight of the catalyst, preferably between 1% and 2% by weight.

6. A process according to claims 3-5, wherein the catalyst is used in an amount in the range 1%-100%, preferably 10%-100% by weight with respect to the weight of the formula (III) compound.
7. A process according to claims 3-6, wherein the inert solvent is selected among perfluorotetrahydrofuran, perfluorotetrahydropyran, or their mixtures.